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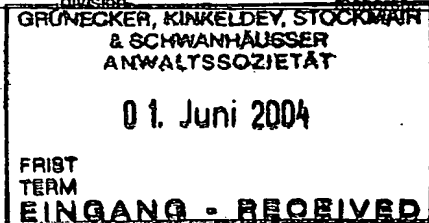
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Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
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COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☐ abstract

☒ title

☒ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract:

1

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 04 00 3546

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|--|---|--|---|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.Cl.7) |
| ① X | DE 23 11 688 A (BUCKAU WOLF MASCHF R; DAVY POWERGAS GMBH) 12 December 1974 (1974-12-12) * figure 1 * * page 6 - page 7 * ----- | 1,2,4,5, 7-18,20, 21,23 3,6,19, 22 | F16L7/00 F16L9/19 F28D7/02 |
| ② X | DE 144 701 C (THOMAS WALTER BARBER) 10 November 1903 (1903-11-10) * figures 3,5 * ----- | 17-20 | |
| ③ X | US 3 250 420 A (KOHN HAROLD B) 10 May 1966 (1966-05-10) * figures 1,2 * * column 2, line 65 - column 3, line 12 * ----- | 1,2,4,5, 7-16 | |
| ④ X | DE 23 20 125 A (SPIRAL TUBING CORP) 24 October 1974 (1974-10-24) * figures 1-3 * * page 6, paragraph 3 - page 7, paragraph 2 * ----- | 1-16 | |
| ⑤ X | US 4 194 560 A (MATSUZAKI YOSHIKI) 25 March 1980 (1980-03-25) * figures 8-10,13,14 * * column 3, line 13 - line 63 * ----- | 1-16 | TECHNICAL FIELDS SEARCHED (Int.Cl.7) F16L F28D F01N F28F B29C |
| ⑥ X | US 6 323 420 B1 (HEAD PHILIP) 27 November 2001 (2001-11-27) * figures 3,9-11 * Y * figure 9 * | 1-16 3,6,19, 22 | |
| ⑦ A | WO 01/02767 A (REMERY JEROEN ; BASTARD ANTOINE (FR); COFLEXIP (FR)) 11 January 2001 (2001-01-11) * figure 3 * * page 6, line 12 - line 26 * ----- | 4,7,20, 23 | |
| 1 The present search report has been drawn up for all claims | | | |
| Place of search Munich | | Date of completion of the search 7 May 2004 | Examiner Untermann, N |
| CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document | | | |

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 00 3546

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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07-05-2004

| Patent document cited in search report | | Publication date | Patent family member(s) | | Publication date |
|---|----|---------------------|----------------------------|---------------|---------------------|
| DE 2311688 | A | 12-12-1974 | DE | 2311688 A1 | 12-12-1974 |
| DE 144701 | C | | NONE | | |
| US 3250420 | A | 10-05-1966 | AT | 258804 B | 11-12-1967 |
| | | | CH | 426907 A | 31-12-1966 |
| | | | DE | 1232413 B | 12-01-1967 |
| | | | GB | 1059705 A | 22-02-1967 |
| | | | NL | 6502296 A | 30-08-1965 |
| | | | NO | 115255 B | 09-09-1968 |
| | | | SE | 300828 B | 13-05-1968 |
| DE 2320125 | A | 24-10-1974 | DE | 2320125 A1 | 24-10-1974 |
| US 4194560 | A | 25-03-1980 | JP | 52124346 U | 21-09-1977 |
| | | | DE | 2711212 A1 | 29-09-1977 |
| | | | FR | 2344805 A1 | 14-10-1977 |
| | | | GB | 1570401 A | 02-07-1980 |
| US 6323420 | B1 | 27-11-2001 | CA | 2292822 A1 | 22-06-2000 |
| | | | GB | 2345199 A , B | 28-06-2000 |
| | | | NO | 996385 A | 23-06-2000 |
| WO 0102767 | A | 11-01-2001 | FR | 2795806 A1 | 05-01-2001 |
| | | | AT | 259486 T | 15-02-2004 |
| | | | AU | 6286300 A | 22-01-2001 |
| | | | BR | 0012041 A | 12-03-2002 |
| | | | DE | 60008246 D1 | 18-03-2004 |
| | | | EP | 1196715 A1 | 17-04-2002 |
| | | | WO | 0102767 A1 | 11-01-2001 |
| | | | NO | 20016076 A | 26-02-2002 |
| | | | US | 6651700 B1 | 25-11-2003 |